

REMARKS

This paper is responsive to the Office Action dated January 16, 2003, having a shortened statutory period expiring April 16, 2003, wherein:

Claims 1-13, 33 and 35 were previously pending in the application;

Claims 1-5, 7-13, 33 and 35 were rejected; and

Claim 6 was objected to.

Claims 1, 33, and 35 have been amended; no claims have been cancelled; and no new claims have been added by the current amendment. Accordingly, claims 1-13, 33 and 35 remain currently pending in the present application.

Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached page is captioned **“VERSION WITH MARKINGS TO SHOW CHANGES MADE”**.

Formal Matters

Applicants wish to express their appreciation for the Examiner's thorough examination and indication of allowability as to Applicants' claim 6 noted in the present Office Action.

Rejections of Claims under 35 U.S.C. §102/103

In the present Office Action, Claims 1-4, 8-13, 33 and 35 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,457,050 B1, issued to Cowan et al. (hereinafter, **“Cowan”**); Claims 5 and 7 were rejected under 35 U.S.C. 103(a) as being unpatentable over **Cowan** in view of well-known prior art.

While not conceding that the cited reference qualifies as prior art, but instead to expedite prosecution, Applicants have chosen to overcome the claim rejections as follows. The following arguments are made without prejudice to Applicants' right to establish, for example in a continuing application, that one or more of the cited references do not qualify as prior art with respect to an invention embodiment currently or subsequently claimed.

Applicants respectfully submit that the cited reference, *Cowan*, fails to teach, show or suggest all elements of Applicants' claims. More specifically, Applicants respectfully submit that *Cowan* fails to teach, show, or suggest a method of operating a network comprising,

dynamically discovering a physical path from said first node to said second node by sending a message from said first node to said second node and dynamically identifying any intermediary nodes comprising said physical path in response to sending said message,

as required by Applicants' claim 1, as amended.

Cowan teaches a system and method for dynamically restoring communications within a network including a real time restoration (RTR) software application. According to the teaching of *Cowan*, the RTR is an independent and centralized entity:

Only one instance of RTR 10 can have control over the restoration process, including communicating with DXCs 12, at any one time. (*Cowan*, Column 6, lines 43-45, see also Figs. 1 and 2)

By contrast, Applicants' claimed embodiments relate to a distributed method and network as described within Applicants' specification which states in relevant part:

Another mechanism employed by the protocol to improve restoration time is *distributed intelligence*, this also permits end-to-end provisioning. The protocol, in one embodiment, relies on a *distributed routing protocol*, which employs event pipelining and parallel execution of protocol processes...the protocol also uses a *distributed database* and relies on *distributed control to restore failures*...Topology distribution normally runs concurrently with, and in parallel to, failure restoration activities (Applicants' specification, page 11, line 26 – page 12, line 10, emphasis supplied)

Applicant's have attempted to clarify this distinction by amending claim 1 to recite "dynamically discovering a physical path from said first node to said second node by sending a message from said first node to said second node" (emphasis supplied).

Regarding Applicants' previously pending claim 1, the present Office Action states *Cowan* discloses that, "route generator 68 (Fig. 6) performs dynamic restoration by using dynamic route generator 25 (Fig. 4) to determine an optimal restoral route for each impacted trunk (dynamically identifying physical path connecting intermediate nodes)...See col. 11, line 50 to col. 12, line 20."

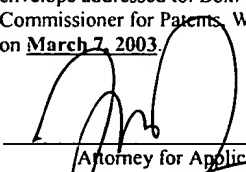
Applicants respectfully submit that the cited portion of *Cowan* fails to teach, show, or suggest "sending a message from said first node to said second node" as claimed (Applicants' claim 1, as amended, emphasis supplied). Applicants submit that, according to the teaching of *Cowan*, restoration control 34 (and consequently route generator 68) as well as dynamic route generator 25 are internal components or sub-elements of the real time restoration (RTR) 10 software application (See *Cowan*, Figs. 4 and 6). Accordingly, Applicants submit that *Cowan* cannot possibly be construed as teaching, showing, or suggesting inter-node messages as required by Applicants' claim. It is therefore respectfully submitted that Applicants' claim 1, as amended, is allowable over *Cowan*.

Applicants' claims 2-13 depend from claim 1 and are therefore allowable for at least those reason(s) stated for the allowability of claim 1. Applicants' claims 33 and 35 include one or more limitations substantially similar to those described with respect to Applicants' claim 1 and are therefore similarly allowable for at least those reason(s) stated for the allowability of claim 1.

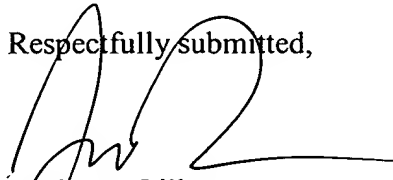
CONCLUSION

In light of the foregoing amendments and remarks, Applicants submit that all claims are now in condition for allowance, and an early notice to that effect is earnestly solicited. Nonetheless, should any issues remain that might be subject to resolution through a telephonic interview, the Examiner is requested to telephone the undersigned.

Attached hereto is a marked-up version of the changes made to the specification and/ or claims by the current amendment. The attached page is captioned "Version With Markings To Show Changes Made."

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to: Box: Non-Fee Amendment, Commissioner for Patents, Washington, D.C. 20231, on <u>March 7, 2003</u> .	
 Attorney for Applicants	<u>3-7-03</u> Date of Signature

Respectfully submitted,


 Justin M. Dillon
 Attorney for Applicants
 Reg. No. 42,486
 Telephone: (512) 439-5097
 Facsimile: (512) 439-5099

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

The following is a marked-up version of the amended claims containing the newly introduced changes, in accordance with 37 C.F.R. § 1.121(b)(1)(iii), showing the changes that the accompanying submission makes to Application Serial No. 09/232,397. Deleted matter is denoted by bold, bracketed type. Added matter is denoted by bold, underlined type.

In the Claims

The claims were amended as follows:

1. **(Amended Four Times)** A method of operating a network, the network comprising a plurality of nodes coupled by a plurality of optical links, comprising:
provisioning a virtual path between a first node and a second node of said plurality of nodes, wherein said provisioning comprises:
identifying said first node and said second node of said plurality of nodes,
dynamically discovering a physical path from said first node to said second node
by **sending a message from said first node to said second node and**
dynamically identifying any intermediary nodes comprising said physical
path **in response to sending said message**, and
dynamically establishing said virtual path by dynamically configuring a set of
connections between said first node, said second node, and said
intermediary nodes, if any, using intermediary links of said plurality of
links.

33. **(Amended Three Times)** An optical network comprising:
a plurality of optical links;
a plurality of nodes, each one of said plurality of nodes coupled to at least one other of
said plurality of nodes by at least one of said plurality of optical links, wherein
said nodes are configured to provision a virtual path between a first node and a
second node of said plurality of nodes by virtue of being configured to:
identify said first node and said second node of said plurality of nodes,

dynamically discover a physical path from said **first** node to said second node by virtue of being configured to **send a message from said first node to said second node and** dynamically identify any intermediary nodes of said physical path **in response to sending said message**, and dynamically establish said virtual path by virtue of being configured to dynamically configure a set of connections between said nodes of said physical path.

35. **(Amended Four Times)** A network comprising:
a plurality of nodes coupled by a plurality of optical links, wherein said plurality of nodes are configured to provision a virtual path between a first node and a second node of said plurality of nodes, wherein each of said plurality of nodes comprises:
identifying means for identifying said first node and said second node of said plurality of nodes,
discovering means for dynamically discovering a physical path from said first node to said second node by sending a message from said first node to said second node and dynamically identifying any intermediary nodes of said physical path in response to sending said message, and
establishing means for dynamically establishing said virtual path by dynamically configuring a set of connections between said nodes of said physical path.